Field Trip

Visiting Suez Oil Company

Zeit Bay and Ras Budran Concessions

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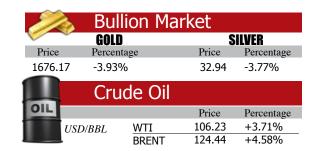


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SandAid™ Sand Conglomeration: Higher sand-free flow rates, Reduced water production.





HIGHLIGHT

EGPC Receives 25 Bids for 15 Concession Areas

May 2012

Issue 65

24 Pages

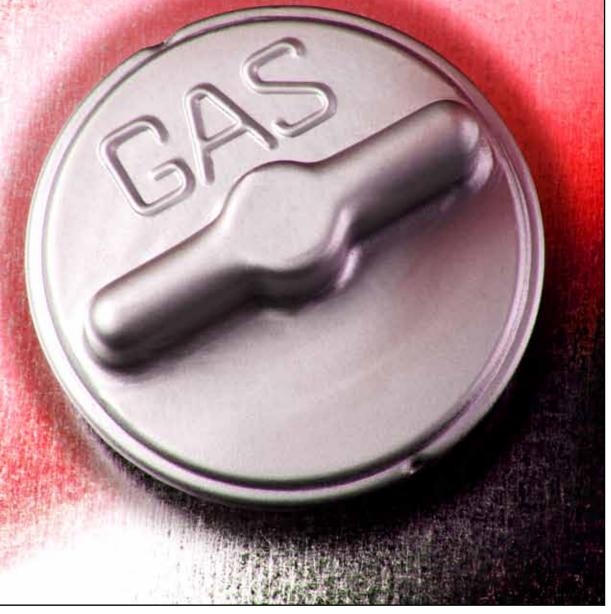
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Smoke and Mirrors

The Cloaked Reality of Halting Gas Exports to Israel

Egypt's sudden decision to cease exportation of natural gas to Israel owing to an alleged financial dispute is almost certainly politically motivated. While it may seem to be a simple populist push on the surface, the move and the intricacy with which it was executed betray more intricate political considerations. Evidence points to an expertly calculated political maneuver carried out under the cover of a controversial and ripple-inducing shock headline.

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Egypt News

Citadel Capital Amends NPC's Sale Agreement



Leading Egyptian private equity firm Citadel Capital revised the terms for the sale of the National Petroleum Company (NPC,), which is owned by Golden Crescent Investments Ltd., an Opportunity-Specific Fund with investments in the Egyptian upstream petroleum industry.

In Focus

Coping with the Zeitgeist

Seeking Solutions for Tomorrow's Inevitable Complications

Over the past decade, the development of Egypt's hydrocarbon resources has seen a significant quantitative rise. Investors lay their aggressive exploration and development strategies, and through intensified campaigns, they strive to achieve their desired targets.



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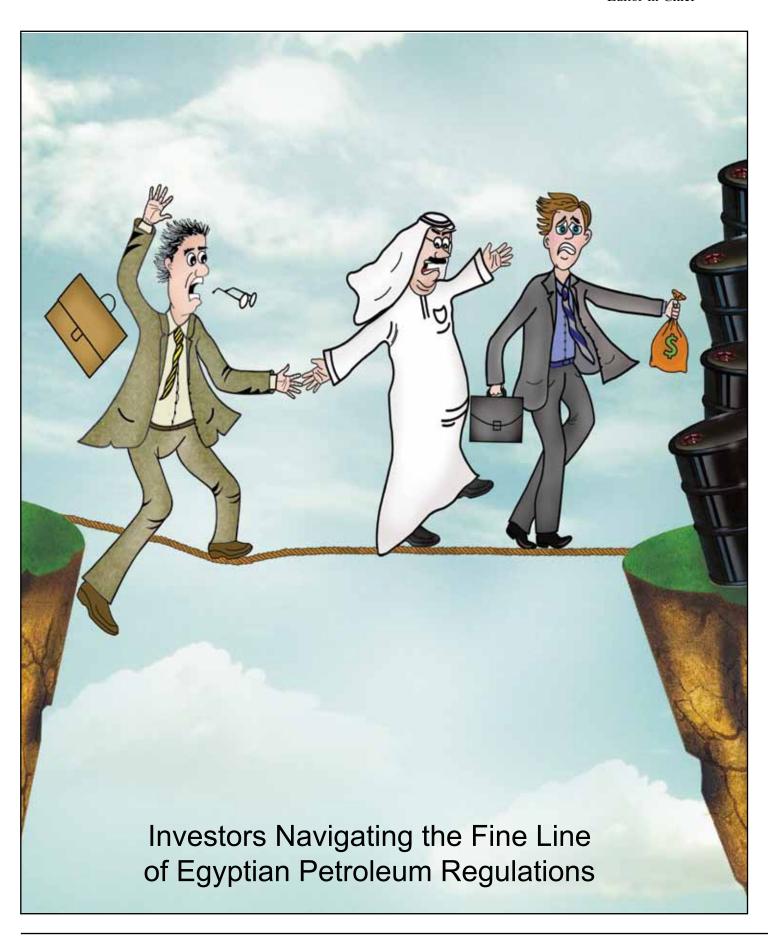
Vote

Despite being convinced that the coming Egyptian President is a *Fait accompli*, if you're going to vote, don't follow the herd, make a choice and stand by it.

On a different note, I would like to extend my thanks and gratitude to Mrs. Yomna Bassiouni, working with her was a rewarding experience and a rare pleasure. I wish her the best of luck on all her future endeavors, though I doubt she would need it.



Mohamed Elbahrawi
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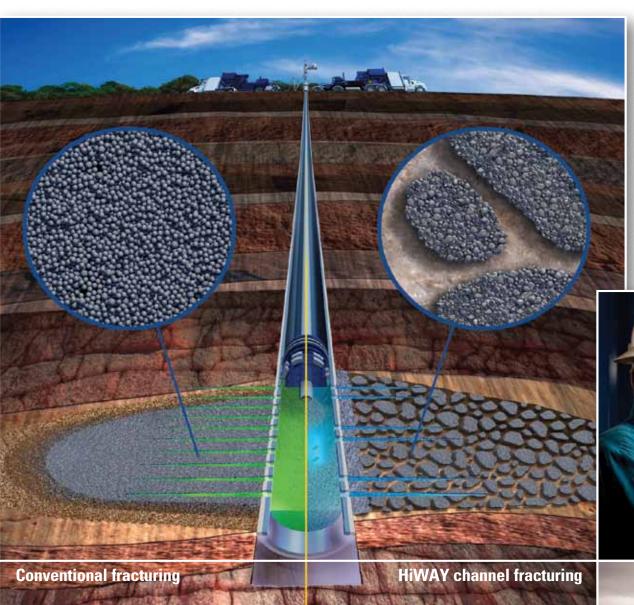
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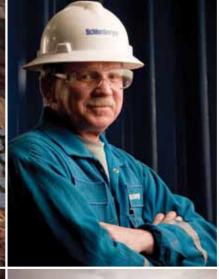
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Egypt News

Further Western Desert Exploration by Edison

Italian petroleum operator Edison exploratory wells located in the company's concession in the Western Desert, which comes in the context of its 2011-2012 exploration plan.

The new RAYAN-2X is an oilproducing well. It was drilled using the EDC-67 rig to the depth of 3,700 feet, attracting \$610,000 in drilling investments.

EDC-67 rig. The well is currently uneach owning 50%. dergoing appraisal.

Edison's operations in Egypt inhas completed the drilling of two clude oil and gas extraction, in addition to distribution of natural gas. The company is currently working on a gas distribution project in Upper Egypt, as well as the Sidi Kreir power generation project.

> Edison is the operator of the West Wadi El-Rayan Blocks with a 60% interest, and

operates in Egypt through Abu Qir The WWER-E-1X well attracted Petroleum, a jointly owned company investments of \$3.766 million. It was in conjunction with Egyptian Gendrilled to a depth of 9,374 feet via the eral Petroleum Corporation (EGPC),

Bapetco Hits Dry in the Western Desert

(Bapetco) has concluded the drilling of a new exploratory well in its Westof its exploration plan for the 2011-2012 fiscal year.

Egypt Oil and Gas has learned that one of the new wells, MAGD-C102-1, was drilled using the EDC-51 rig to a depth of 11,733 feet, with drilling costs reaching \$2 million. The new wildcat has been abandoned as a dry hole.

During the previous fiscal year, Bapetco successfully drilled 34 wells,

Badr El Din Petroleum Company and the company is looking to drill 44 exploratory and developmental wells in the current fiscal year 2011ern Desert concession area as part 2012 in order to boost total production of crude oil and natural gas.

> During March 2012, Bapetco's production figures stood at 1,150,409 barrels of crude oil and 2,136.071 cubic feet of natural gas.

> Badr El Din Petroleum is a joint venture company between the Egyptian General Petroleum Corporation (EGPC) and Royal Dutch Shell that was found in 1983.

New Developmental Well by Rashpetco in the Mediterranean

Company Petroleum (Rashpetco) has successfully completed drilling a new developmental well in its Nile Coastal, Deep Water Sub-basin concession, in the context of its development plan for the 2011-2012 fiscal year.

The gas-producing well, dubbed SWAN-1 ST2, was drilled to a depth of 10,640 feet via the SCARABEO-6 rig. Sources placed investments in the well at \$59 million.

During March 2012, Rashpetco's production figures stood at 10,655 barrels of crude oil and 2,140,714 cubic feet of natural gas.

Rashpetco is a joint venture company between British petroleum company British Gas Group holding 40% interest, the Italian operator Edison holding 10%, and the Egyptian General Petroleum Corporation (EGPC) with the remaining 50%.

Two New Western Desert Wells by Agiba

Agiba Petroleum Company has concluded the drilling of two new developmental wells in the company's Western Desert lease, the ARCA-DIA-6 well and the AGHAR 4-17. The operations come in accordance with the company's drilling plan for the 2011-2012 fiscal year.

Sources revealed investments in the ARCADIA-6 oil-producing well to be \$2 million. The well is located in the Arcadia field in the Shoushan sub-basin in Agiba's Meleiha development lease. It was drilled to a depth of 10,550 feet utilizing the ST-8 rig.

The AGHAR 4-17 oil-producing

well, was drilled utilizing the PDI-147 rig, to a depth of 6,100 feet. Costs of the well amounted to \$390,000, and its output has been added to the company's overall production.

During March 2012, Agiba's production figures stood at 1,205,281 barrels of crude oil and 59,759 cubic feet of natural gas.

Agiba is a joint venture company that includes Eni with 28%, Lukoil Overseas with 12%, the International Finance Company (IFC) with 10%, and the Egyptian General Petroleum Corporation (EGPC) holding the remaining 50%.

Khalda Drills New Developmental Well in Abu El-Gharadiq

Khalda Petroleum Company has concluded drilling of the new AG-85 developmental well in the company's lease located in Abu El Gharadiq South field, Abu Gharadiq Basin of the Western Desert. The new well comes in the context of its development plan for the current fiscal year.

The oil-producing well was drilled at 11,950 feet using the ST-6 rig, and its production figures has been added to the company's overall rates. \$3 million of investments were pooled into the operation.

During March 2012, Khalda's production figures stood at 4,483,100 barrels of crude oil and 4,829,821 cubic feet of natural

Khalda Petroleum is a joint venture company between the Egyptian General Petroleum Corporation (EGPC) and US-based operator Apache.

New Eastern Desert Well by Magapetco

Magaweesh Petroleum Company (Magapetco) has concluded drilling the new exploratory well EEMM-13, which is located in East Esh El Mellaha Marine concession.

Initial flow tests indicate the well to be oil-producing and it is currently in the appraisal stage. \$1 million of investments were pooled into the drilling the new

well. Using the ZJ-45L rig, the well was drilled to a depth of 10,760 feet.

During March 2012, the company's production figures stood at 81,934 barrels of crude oil.

Magapetco is a joint venture between the Egyptian General Petroleum Corporation (EGPC) and Trident Petroleum Egypt.

Apache Spuds New Exploratory Well in West Kalabsha

US-Based operator Apache exploration and development Corporation has successfully drilled an exploratory well, dubbed W.KAL-N-1X, located in the company's West Kalabsha block in the Western Desert. The well comes in the context of the Apache's drilling plan for the current fiscal year.

Drilling was conducted to a depth of 15,140 feet using the EDC-59 rig. The oil-producing well attracted investments amounting to \$4.203 million.

Apache Corporation is an oil

company with operations in various countries including the US, Australia, Canada, Argentina, the UK, and Egypt. The company produces an approximate 265,000 barrels of oil and 1.5 billion cubic feet of natural gas per day. The company operates in Egypt through Khalda Petroleum and Qarun Petroleum, both of which are jointly owned by the Egyptian General Petroleum Corporation (EGPC).

NOSPCO Drills New Mediterranean Well

North Sinai Petroleum Company (NOSP-CO) has drilled a new developmental well in the company's concession in the Mediterranean Sea. The well, labeled TAO-SW-F ST-2, is part of the company's 2011-2012 development plan.

Drilling was conducted using the SEN-SURT rig to a depth of 7,897 feet, with drilling investments amounting to \$16.476 million. The natural gas-producing well has yet to be included to the company's overall production numbers.

During March 2012, the company's prdouction rates of natural gas stood at 592,143 cubic feet.

NOSPCO is a joint venture between the Egyptian General Petroleum Corporation (EGPC) and French operator Prenco.

WASCO Drills Nile Delta Developmental Well

El Wastani Petroleum Company (WAS-CO) has successfully concluded the drilling of the new S.FARASKUR developmental well in the company's fields in its Nile Delta concession area. The operation comes in accordance with WASCO development plan for the 2011-2012 fiscal year.

Sources disclosed that \$220,000 of investments were pooled into the drilling operation. The natural gas-producing well was drilled to a depth of 8,957 feet using the EDC-66.

During March 2012, Wasco's production figures stood at 118,247 barrels of crude oil and 965,616 cubic feet of natu-

WASCO is a joint venture company between the UAE-based Dana Gas, holding a 50% interest, and the Egyptian General Petroleum Corporation (EGPC) holding the other half.

SUCO Drills Developmental Well in Eastern Desert

Suez Oil Company (SUCO) has concluded drilling ZB-24 ST-1, a new developmental well in the company's Zeit Bay Development lease in the Eastern Desert. The operation comes in the context of SUCO's development plan for the 2011-2012 fiscal year.

Sources revealed costs of drilling to be \$3.137 million. The oil-producing well was spudded to a depth of 5,187 feet via the use of the PDI-104 rig, and its output has been added to the company's overall production num-

SUCO's drilled a total of 34 wells in the last fiscal year, and is aiming for 44 exploratory and developmental wells to be concluded during the current fiscal year in order to raise oil and gas production.

During March 2012, SUCO's production figures stood at 537,119 barrels of crude oil and 50,383 cubic feet of

SUCO is jointly owned by the Egyptian General Petroleum Corporation (EGPC) and German company RWE



Two New Discoveries by Kuwait Energy

Kuwait Energy has discovered crude in two different areas after drilling two new exploratory wells in the company-owned concessions in Egypt. The operation comes in the context of Kuwait Energy's development plan for the current fiscal year.

The ELSALMIYA-1X ST well was drilled in Kuwait Energy's Abu Sennan Western Desert lease. The well was drilled utilizing the ZJ-47L rig to a depth of 12,465, entailing costs of \$6.181 million. Initial tests revealed the well to be oil-producing.

The company was also successful with the West Ahmad-1X well located in Area A in the Gulf of Suez. Drilling encountered oil in the Kareem formation, resulting in an initial flow rate of 1,250 barrels of oil per day.

Kuwait Energy Chief Operations Officer, Mohammad Alhowqal, commented, "This is another great success in a mature field that has been producing since 1960. Our new oil discoveries in Area A have significantly increased gross production in the area from 2,800 to 7,250 bopd since commencing operatorship in 2008. We look forward to continued success and to reaching the maximum potential of this field."

Kuwait Energy is the operator of three blocks in Egypt namely the Area A, Burg El Arab development lease and Abu Sennan concession, and has working interest share in two other blocks, Mesaha concession and Petroshahd development lease (East Ras Qattara).

The company's operations in Egypt account for the larg-

est share in the company's overall production. The company's total output from Egypt, Lebanon, Iraq, and Egypt is at 17,500 barrels per day.



Choice Words



Imposing new taxes will make the Egyptian market less attractive for investors

Eng. Abdallah Ghorab, Minister of Petroleum



The current agreement model needs to be amended because the majority of problems stem from cost recovery

Samir Abdelmoaty, BP's Exploration and Agreements Consultant



★ The timing isn't right for amending the current agreements with foreign investors

د د

Mohamed Shoeib, head of EGAS, Al-Borsa News



gas supply to Israel but at a new price and with new conditions

Fayza Abu El-Naga Minister of International Cooperation, Al-Arabiya News



The decision to cancel gas exports to Israel is purely commercial and has no political dimensions

Hani Dahy, Head of the EGPC, Al-haram

Indian GSPC Drills \$52 Million Dry Hole in the Mediterranean

Indian state-owned oil firm Gujarat State Petroleum Corporation (GSPC) has hit a dry hole in its Mediterranean Sea exploration lease after investing \$52 million in the drilling operation. The operation came in the context of GSPC's 2011-2012 exploration plan.

The N.HAPY-1X exploratory well was drilled using the N.P.RMNO rig to a depth of 8,957. Drilling was intended to for natural gas but the well was plugged and abandoned as a dry hole.

GSPC had decided to continue with oil and gas exploration plans in Egypt after sending a team to reassess the venture in January, following a funds crunch at the company. The Indian oil firm had originally secured access to five blocks in the Mediterranean in an open bid round in 2006.

GSPC operates in Egypt as well as Yemen, Indonesia, and Australia, in addition to its native India.

Petrobel Expands Well Portfolio

Belayim Petroleum Company (Petrobel) has concluded drilling operations for two new developmental wells, the 113-M-113 well and the EBLS-2 well in adherence to its drilling plan for the 2011-2012 fiscal year.

The 113-M-113 oil-producing well was drilled in the company's Western Desert concession. Sources revealed investments in the oil-producing well amounted to \$8 million. Drilling was conducted to a depth of 9,938 feet, utilizing a G.SF-105 rig. Oil from the well has not been added to Petrobel's overall production figures.

The EBLS-2 well was drilled in Petrobel's fields in its Sinai concession at a cost of \$3.4 million, and is also oil-producing. It was drilled via the ST-1 rig at a depth of 9,810 feet, and its production was subsequently added to the company's production numbers.

During March 2012, Petrobel's production figures stood at 4,133,154 barrels of crude oil and 9,652,093 cubic feet of natural gas.

Petrobel is a joint-venture between the Egyptian General Petroleum Corporation (EGPC) and Italian operator Eni.

Petrosilah drills Western Desert Developmental Well

Petrosilah Petroleum Company has drilled a new developmental well, labeled SILAH-16, in the Silah fields in the Fayioum Development Blocks in the Western Desert as part of the company's development plan for the current 2011-2012 fiscal year.

The oil-producing well was drilled using the EDC-53 rig, to a depth 7,100 feet, and is yet to be added to Petrosilah's overall production rates. Costs of the operation amounted to \$1.5 million.

During March 2012, the company's production figures stood at 120,590 barrels of crude oil.

Petrosilah is a joint venture between the Egyptian General Petroleum Corporation (EGPC) and American oil company Merlon International.



GUPCO's Production Figures Witness Narrow

Fluctuations

Last March, the company completed the drilling of two new wells in adherence to GUPCO's development plan for the 2011-2012 fiscal year.

The 'EM 306-1 ST1' is an exploratory crude-producing well situated in the Gulf of Suez. It was drilled to a total depth of 14,000 feet via the KAMOSE rig, with drilling investments totaling \$13.79 million.

Also in the Gulf of Suez, the company completed the drilling of an oil-producing developmental well, dubbed 'J 58-81A ST-2,' with drilling investments averaging \$5 million. Using the rig BENNE-VIS, drilling has reached the depth of 10.335 feet.

According to the analytical report conducted by Egypt Oil & Gas to assess the performance of the Gulf of Suez Petroleum Company (GUPCO,) production figures have wit-

nessed bouts of narrow fluctuations from October 2011 to March 2012.

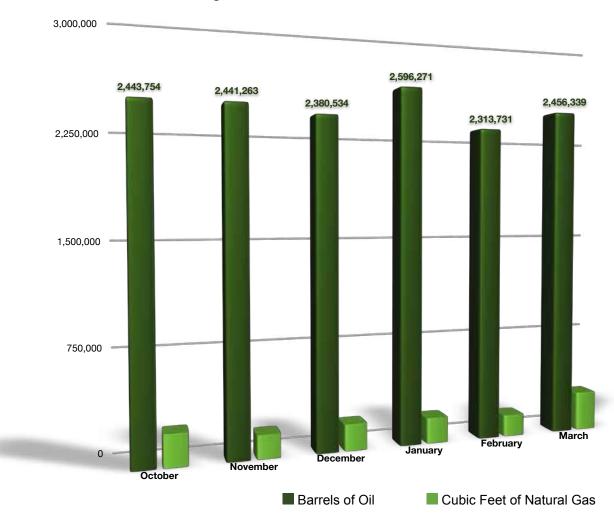
The analysis concluded, the company's crude oil production rates averaged 2,438,684 barrels of and 202,578 feet of natural gas.

Over this period, crude production peaked in January 2012, standing at 2,596,271 barrels, and hit its lowest point February 2012, falling to 2,313,731 barrels.

During the same timeframe, GUPCO's natural gas production peaked in March 2012, standing at 284,816 cubic feet. The company's lowest rate during the aforementioned period was in February 2012, standing at 157,575 cubic feet.

GUPCO is a joint-venture company between British Petroleum (BP) and the Egyptian General Petroleum Corporation (EGPC.)





Seesawing Production Indicators by Qarun Petroleum

Production reports indicate that Qarun includes 4 other developmental wells: Petroleum Company's production rates of crude oil and natural gas have shown inconsistency during the period between October 2011 and March 2012. The company's production numbers have been varying significantly during this period, as illustrated by the graph.

Four new developmental wells were drilled by Qarun in the company's Western Desert concession area. The operations are part of Qarun's development plan for the current 2011-2012 fiscal year.

The KARAMA SW-24 well attracted investments of \$1.146 million. It was drilled to a depth of 8,100 feet using the EDC-17, and is oil-producing.

The YOMNA-22 well, also oil-producing, was drilled using the EDC-64 rig to a depth of 5000 feet. Costs of the operation reached \$790,000.

YOMNA-24, another oil-producing well, was drilled to a depth of 4,900 feet at operational costs of \$500,000. The well has not yet been added to the company's overall production numbers.

Yet another developmental well, labeled HEBA-503, was drilled utilizing the EDC-63 rig, to a depth of 6,550 feet. Sources revealed investments in the operation to have reached \$900,000.

Qarun's portfolio in the Western Desert

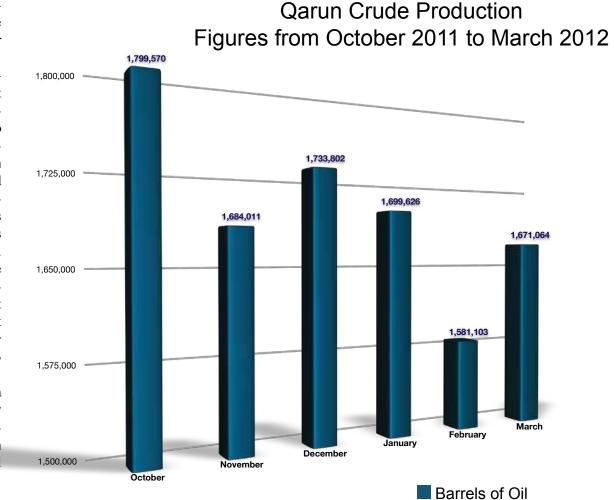
EAST SAMRA-14, AL DIOR-49, HEBA-

127, and SAMRA-69. Aggregate production figures from these wells have reached 1,220 barrels per day.

According to the assessment conducted by Egypt Oil & Gas covering the period from October 2011 to March 2012, Qarun's production figures have been seesawing on a downward trajectory. The analysis concluded that the company's crude oil production rates averaged 1,694,862 barrels.

Over this period, crude production peaked in October 2011, standing at 1,799,570 barrels, and hit its lowest point in February 2012, falling to 1,581,103 barrels.

Qarun Petroleum is a jointly owned company between the Egyptian General Petroleum Corporation (EGPC) and American Oil operator Apache Corp.



New Exploratory Well in Kom Ombo by Sea Dragon

Canadian operator Sea Dragon has completed the drilling of a new well in Al-Baraka oilfield, located the concession area of Kom Ombo, north of the city of Aswan.

West Al-Baraka 2 (WAB-2 is an exploratory oil-producing well. It was drilled to a total depth of 4,070 feet. According to Sea Dragon, the company plans to "integrate the WAB-2 well information with the recently reprocessed seismic to finalize mapping of the West Al Baraka structure, estimate reserves, develop an appraisal program and apply for a development lease."

Currently, the production rates of Al-Baraka average 520 barrels of oil per day.

The concession area of Kom Ombo is jointly operated by Sea Dragon and Dana Gas, with each holding 50% working inter-

New Sub-Salt Mapping Technology by GETECH

A new Advanced Geophysical Services study conducted by GETECH, a petroleum exploration consultancy company, in conjunction with Aramco Overseas Company that aims to map the sub-salt basin structures and depth to basement in a part of the Red Sea. The new study will utilize innovative techniques and methodologies to particularly map sub-salt basin areas that are difficult to map with conventional seismic reflection

Prof Derek Fairhead, President and Founder of GETECH, commented 'Having developed new technology and methodologies, it is very encouraging to be able to apply them to recently acquired high resolution airborne gravity, gravity gradiometer and magnetic data in an area where, because of the salt, conventional seismic is challenged to image the basement structure in a reliable way.'

The Advanced Geophysical study results from over two years of developing and testing new 2D and 3D potential field inversion methods. The methods are mainly magnetic and provide clearer images of fault and basement structures using phase and wave number derivatives via the Tilt-Depth and Tilted block methods

The advantage of the phase and wave number methods is that they minimize the effects of rock magnetization and allow better imaging and clearer understanding of deep basement structures. GETECH reported that the study aims to validate the accuracy of mapping the Red Sea margin. Delivery is anticipated in the third quarter of 2012.

Citadel Capital Amends NPC's Sale Agreement

Leading Egyptian private equity firm ing until 1 May 2012. Citadel Capital revised the terms for the sale of the National Petroleum Company (NPC,), which is owned by Golden Crescent Investments Ltd., an Opportunity-Specific Fund with investments in the Egyptian upstream petroleum industry.

On the 21st of March, Citadel Capital signed an amended share purchase agreement with the Canadian operator Sea Dragon Energy Inc. to sell a 100% of the former's share in NPC to the latter.

The value of the closing consideration payable by Sea Dragon to Golden Crescent under the amended share purchase agreement remains unchanged at US\$ 147.5 million.

As indicated in the execution of the amended share purchase agreement, Sea Dragon has until 8 May 2012 to complete the transaction (subject to a 10-day extension), while Golden Crescent has a non-exclusivity period in which to solicit and entertain alternative proposals last-

Citadel Capital, which has management control of Golden Crescent, notes that volatile local and international conditions could affect the conclusion of the transaction. This announcement does not constitute a promise to conclude the transaction, as Citadel Capital notes that Sea Dragon must obtain approvals and other clearances from its shareholders, lenders, and regulatory authorities.



Petrodara Completes Eastern **Desert Develop**mental Well

Petrodara has undertaken the drilling of a new developmental well, ARTA-34-ST-1 in the company's fields in its Eastern Desert, as part of the development plan for the 2011-2012 fiscal year.

The oil-producing well was drilled using the ST-7 rig, to a depth of 3,933 feet; production from the well is yet to be added to Petrodara's overall numbers. Costs of the drilling operation reached \$650,000.

During March 2012, Petrodara production figures stood at 369,373 barrels of crude oil.

Petrodara is a joint venture between the Egyptian General Petroleum Corporation (EGPC) and German company Dublin.

EGPC Receives 25 Bids for 15 **Concession Areas**

Egyptian Petroleum Ministry has received 25 proposals from 12 international companies to search for oil and gas across the Eastern and Western desert, Gulf of Suez and Sinai, stated Adel Saeed, the Vice Chairman of the Egyptian General Petroleum Corporation (EGPC). The deadline for the international tender for the 15 concessions ended last March. The EGPC will look at the bids over the next week, said Saeed without disclosing when a decision will be made.

Last Issue's Corrections

Page 7: It is wrongly stated that Abu Qir Petroleum is a joint venture that includes the EGPC and the Improved Petroleum Recovery Group (IPR.) Abu Qir is jointly owned by the EGPC and the Italian Operator Edison

Page 16: Stated mistakenly cited that Geologist Mostafa Al-Bahr is the Vice Chairman for Agreements and Exploration of GANOPE. Mr. Al-Bahr is the Vice Chairman for Agreements and Exploration of EGAS.

Page 18: It is incorrectly mentioned that Geologist Abu Bakr Ibrahim of GANOPE stated that the number of PSC agreements currently in place to be 146. The correct number is 149 and was stated by Geologist Adel Said, the EGPC's deputy CEO for Agreements.

Guest Column



What's Behind the Termination of Israel's Gas Contract?

The termination of the gas exportation contract to Israel on the 22nd of last month came as shock to the public, yet this calculated move could have been in the pipelines for a while!

Let's get one thing clear from the outset. The termination announcement was made by the Egyptian state-owned EGPC and EGAS, and not the Egyptian government. This is clearly evident as Eng. Mohamed Shoeib, head of EGAS, was the bearer of the message, and not the Minister of Petroleum Eng. Abdallah Ghorab. In addition, both Egyptian and Israeli officials rushed to make the case that the termination was due to a commercial dispute without political considerations.

Yet, was it merely commercial?

The announcement declared the termination of the gas supply and purchase agreement between the EGPC and EGAS as suppliers and East Mediterranean Gas Co. (EMG) as the purchaser. Egyptian agencies claimed the termination was based on a breach of contract by EMG, namely, EMG's nonpayment for purchase of gas for a period over three months. Apparently, in accordance with the terms of the contract, nonpayment for three months or over allows the supplier to terminate

In addition, over the last year, 14 attacks have taken place on the pipeline causing a major shortfall in gas supply to EMG. This resulted in EMG's initiation of arbitration against the Egyptian oil and gas companies in October 2011, claiming \$8 billion in losses.

It should be noted that termination of the contract takes effect on future performance of obligations under the contract and not past, performance or none-performance, thus the arbitration case would still stand.

We can see the legal dimension of the current situation and that it is very much a commercial dispute. However, there also seems to be a political agenda in play behind the scenes. The original footing for this commercial contract was provided via the Camp David 1979 treaty, yet it only stipulated the supply of oil, not natural gas.

Then in 2005, the Egyptian government sealed a memorandum of understanding with the Israel government for the supply of gas. Thus, termination of any government-backed contracts will undoubtedly have political ramifications.

Whether this is a commercial or political dispute, one thing is clear; this has forced the Egyptian and Israel governments back to the negotiation tables, even if these negotiations remain unofficial for the moment. What is unclear is the effect this will have on Egypt's long-term relationship with Israel and the international community.

Sherif Hefni BA, GDL, BVC.

Associate at Hegazy & Associates in association with Crowell & Moring LLP.

Nigeria Delays Crude-Selling Tender Closing Date

Nigerian National Petroleum Corp. tracted to Nigerian firms. said it extended the closing date and amended terms for bids in its tender to sell crude oil for one year starting from June.

NNPC, as the state-run company is known, will accept bids until May 11, compared with a previous close of April 5. NNPC didn't disclose the amount or type of crude being offered for sale.

The company also relaxed conditions on potential buyers, requiring them to have a minimum annual revenue of \$500 million and a net worth of at least \$100 million, compared with earlier thresholds of \$600 million and \$300 million, respectively. Buyers are also now required to include a plan in their bids that include insurance and legal, banking and finance as well as cargo inspection that will be subcon-

Successful bidders must show commitment to develop the economy of Africa's most populous nation with more than 160 million people by investing in industries including oil exploration, refineries, power plants, solid minerals and agriculture, according to the statement.

All tenders received before the earlier close of April 5 remain valid, NNPC said. Buyers who want to change their bids in line with the new terms can do so, according to the

Nigeria is Africa's top crude producer and the fifth- biggest source of U.S. imports. At least 90% of the country's oil is pumped by Royal Dutch Shell Plc., Exxon Mobil Corp, Chevron Corp., Total SA and Eni SpA in joint ventures with the NNPC.

Clashes along Sudan-South Sudan Border in Oil-Producing Region

Violence broke out in the oil-rich border area between Sudan and South Sudan, resulting in the seizure of Heglig, Sudan's biggest oil field, by South Sudan. The fighting, which has witnessed a gradual escalation, raises fears of a return to all-out conflict between the two states.

Sudan accused South Sudan of mounting an attack on the country's border region

"Areas of South Kordofan state, most notably Heglig, were brutally attacked by the SPLA, supported by the state of South Sudan, using mercenary forces and rebel groups," Sudan's Information Ministry claimed in a statement.

South Sudan claimed that Khartoum had carried out the first strikes on Monday by attacking South Sudan's oil-rich border regions, and asserted that its forces had acted in retaliation, defeating the Sudanese forces and advancing into Heglig.

South Sudanese President Salva Kiir reaffirmed his country's alleged commitment to peace stating:"It is a war that has been imposed on us again, but it is they (Khartoum) who are looking for it,"

The border area has been marred by border disputes between Sudan and its nascent neighbor since South Sudan gained formal independence in July.

In the process of gaining independence, South Sudan succeeded in securing most of the former unified state's oil fields. The oil must be exported through pipelines that lie in Khartoum's territory, however, which prompted bouts of disagreements.

Juba to halted its production of 350,000 barrels a day national oil production, which accounts for 98% of the country's revenue.

Both sides accuse the other of supporting rebel forces and militias inside the territory of its counterpart, and violence between the two states has damaged the prospects of a peaceful resolution to issues of border demarcation and status of citizens.

The decades long civil war between the two sides, which ended with the cessation of South Sudan, resulted in roughly 2 million casualties.

Eco Atlantic Signs Joint Operating Agreements with Namibia

nounced that, through its whollyowned subsidiary, it has entered into five separate Joint Operating Agreements with the National Petroleum Corporation of Namibia (NAMCOR,) with respect to its five license blocks onshore and offshore Namibia.

Through the company's whollyowned subsidiary, Eco Oil and Gas Namibia (Eco Namibia), the company has entered into the agreements with NAMCOR to establish their relations with regard to the jointly held Licenses.

President and CEO Gil Holzman commented, "these Agreements signed by NAMCOR, the National Namibian Petroleum Company is a significant achievement for Eco Atlantic. The professional AIPN based Agreements signify once again Eco Atlantic's strong relationships with Namibian authorities and deep cooperation with the Country. Eco Atlantic will benefit from NAMCOR's significant local presence, years of Namibian experience and strong data base of information." Holzman added, "Eco Atlantic is looking forward to a long and successful business partnership with NAMCOR, and working cooperatively to progress our exploration efforts onshore and offshore Namibia."

Offshore, Eco Atlantic has a 70% working interest, Azimuth Ltd. has

Eco Atlantic Oil & Gas has an- a 20% working interest and NAM-COR holds the remaining 10% carried working interest. Onshore, Eco Atlantic has a 90% working interest and NAMCOR holds the remaining 10% carried interest. Under the terms of the agreements, Eco Atlantic will carry the costs of NAMCOR's 10% working interest until initial production.

> production commences, Once NAMCOR will reimburse Eco Atlantic from production for the full previously carried amount plus an additional 20% interest. Eco Atlantic has also agreed to pay for and provide training for NAMCOR's geologists

and personnel involved in the operations of the licenses.

Eugene Shepherd, Managing Director of NAMCOR, commented, "NAMCOR as the National oil company is delighted at the progress made in reaching these Agreements with Eco Atlantic. This represents an important step towards empowering Namibians and including them in the development of the Nation's oil and gas resources. These Agreements will not only serve the interests of the parties to the exploration and production activities, but will also serve as a basis for NAMCOR's future negotiations with other E&P partners."



Statoil Enters Ghana

Norwegian oil and gas giant Statoil ASA made its first venture into oil-rich Ghana on April the 25th by farming into a deepwater concession operated by Hess Corp.

The acquisition underscores mounting appetite by majors for Africa's newly-emerging hydrocarbon provinces, after Royal Dutch Shell Plc agreed to buy Mozambique natural-gas player Cove Energy Plc.

Statoil said it would assume a 35% working interest in the Deepwater Tano/Cape Three Points offshore Ghana, under a farm-in agreement where a new entrant pays a share of the cost of searching for oil and gas in exchange for a stake in a block.

Stuart Joyner, an analyst at broker Investec, called the move a "modest positive" for Statoil. Although a "lot of oil has been discovered in Ghana, it is unclear how much the Hess-operated license holds", he said.

In 2011, Hess encountered an estimated 490 net feet of oil and gas rich-sands while drilling of an exploration well in the block, though no new details have emerged since. A new well is underway, which result is expected within the end of second quarter of this year, Statoil said.

Under the agreement, Statoil will also cover part of the costs associated with a 10% stake held by the state-owned Ghana National Petroleum Co., bringing the total paying interest to 38.89%. The deal will also dilute Hess's stake from 90% to 55%.

The concession lies just south of the giant Jubilee field, operated by Tullow Oil Plc, which is predicted to have plateau production of 120,000 barrels a day.

While Nigeria and Angola, Africa's two largest oil producers, have received the majority of foreign oil investment in the past, majors are increasingly focusing on new provinces such as Ghana, Uganda or Mozambique.

On the 24th of April, Shell said that it had agreed a GBP1.12 billion all-cash deal to buy Cove Energy, a junior partner in a potentially huge natural-gas field off the Mozambique coast.

Shell Eyes East Africa Prospects, Bids Cove Energy \$1.8m

Royal Dutch Shell Plc has edged ahead of Asian competition in the scramble for east Africa's gas reserves by making a recommended \$1.789 Billion bid for Cove Energy.

The Anglo-Dutch group received the backing of Cove's directors after matching a bid from PTT Exploration, the Thai-state controlled oil firm. Shell and PTT have been drawn to the company's 8.5% stake in a natural gas block off the coast of Mozambique that may contain 30tn cubic feet of reserves - which can then be shipped across the Indian Ocean to the gas-hungry Asian market.

Shell acknowledged that other bidders could still announce "competing offers for Cove", with Gail India and Oil & Natural Gas Corpora-

tion, both from the sub-continent, thought to be possible joint bidders. PTT said it was "considering its options" as analysts speculated that the company could return with a higher bid.

One analyst, however, said the Mozambique government was likely to back Shell as the bidder that offered the most expertise in extracting gas from the Rovuma Offshore Area 1 gas-block. The deal is conditional on government approval. Andrew Matharu, analyst at Westhouse Securities, stated that, "a key component of this is how the Mozambique authorities want to develop their resources and a project of this scale needs an oil major with the financial resources and the expertise of bringing world class scale projects to fruition so you need someone like Shell."

Michael Blaha, Cove Energy's Executive Chairman, said he expected state backing. "I am confident, following our discussions with the government of Mozambique, that timely consent for Shell's offer will be forthcoming." Cove's directors own 4.38% of the business, with the transaction valuing their stake at \$69.139 million. Analysts at Investec noted an increased in Cove's share price in the wake of the Shell announcement and said PTT could return with a higher bid. "

Shell is seeking to reduce its dependence on oil in favor of gas and East Africa has emerged as a target area for energy majors with similar ambitions. American Anadarko Petroleum owns a third of the Rovuma field, followed by Mitsui of Japan with 20%, with two Indian oil groups owning 10% each. Mozambique's state oil company owns a 15% stake in Rovuma. Elsewhere, Italy's Eni, Norway's Statoil and the UK's BG Group have also discovered gas off Mozambique and Tanzania, although Shell has not been successful so far.

Shell plans to increase spending on oil and gas exploration this year by 35% to \$5 billion and has a strong presence in the gas market as the world's largest manager of ships for transporting LNG and supplied 30% of global LNG volumes last year. East Africa is tipped to become a major gas-producing region in the wake of the Rovuma discovery, with China and India among the field's likely Asian customers.



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EInternational News

Total Continues Efforts to End Elgin Gas Leak

French oil giant Total has taken steps to contain and end a natural gas leak in the company's Elgin platform in North Sea of the UK, off the coast of Scotland.

Total reported making significant progress in its plans to "kill" the well, which involve pumping drilling mud into the well in order to cap it as well as drilling a primary relief well and a backup relief well below the platform. Two rigs, the Sedco 714 and the Rowan Gorilla V, were mobilized to drill the relief wells.

"We are working hard and if all goes as planned we envisage by the end of this month we should be having control of the well," said Philippe Guy, managing director for regional operations at Total. He added that the well kill operation should be concluded by the end of April.

Texas-based company Wild Well Control was contracted to assist local company Oil Spill Response in dealing with the leak.

Following their boarding of the platform to assess the situation, Wild Well Control representatives stated: "We achieved our goals. Everything went as we would have hoped and the planned well intervention is achievable. There is certainly no showstopper to launch the well control operation."

The Elgin platform, which lies roughly 150 miles off the cost of Aberdeen, was evacuated following confirmation of a substantial natural gas leak from the platform which has been ongoing since 25 March.

The Scottish government had earlier announced that the environmental threat resulting from the leak was minimal. Tests revealed that fish in the vicinity of the leak remained "untainted".

Costs of the well control operation were estimated by Total to be at \$2.5 million a day.

Argentina to Nationalize Repsol YPF

Argentina is moving forward with the decision to nationalize oil company YPF Repsol and bring it under state control. The proposal, introduced by Argentine President Cristina Fernandez, has been met with strong support by the country's Congress and is expected to be passed by the legislative body.

Argentina's government is to seize 51% of the company's shares, all of them currently held by Spanish oil firm Repsol, which holds a controlling 57% stake in the company.

President Fernandez claimed that the move was motivated by Repsol's alleged lack of investment in YPF, accusing the Spanish company of draining YPF and taking most its profits back to Spain, depriving Argentina of the funds needed to develop new energy sources.

"We are the only country in Latin America, and I would say in practically the entire world, that doesn't manage its own natural resources," Fernandez said. She went on to brand the move a "recovery of sovereignty."

Fernandez had previously renationalized both the Areolineas Argentinas airline and the Anses state private pension funds.

Argentina has been suffering from energy shortages and high gasoline prices, and has become a net exporter of oil in recent years. The country imported an estimated \$9.3 billion of oil in 2011, and the number is expected to reach \$12 billion for the current year. YPF made a significant shale oil discovery in Argentina's Vaca Muerte region in November, but developing the resource will be expensive.

Repsol will be compensated for the expropriated shares, according to the valuation of an Argentine panel.

The move prompted furious criticism from both Repsol and the Spanish government. Repsol has threatened to sue any company that participates in developing Argentina's expropriated petroleum resources. Spanish Foreign Minister Jose Manuel Garcia-Margallo labeled the move "arbitrary" and threatened that his country would retaliate with unspecified "forceful measures."

The nationalization initiative was also condemned by the World Bank and the European Commission, which warned that it would deter foreign investment from Argentina.

YPF, which was privatized in the 1990s, produces 34% of Argentina's oil output, as well as contributing 25% of natural gas production. The company also 54% of Argentina's refining capacity.

First Well in West Qurna 2 Field

Iraq's oil minister Abdel Kareem al-Luaibi announced on 25 April the inauguration of the first oil well in Iraq's supergiant West Qurna 2 oilfield in the south of the country.

The well will initially produce 150,000 barrels per day during the current year, with the aim of increasing the field's overall production to reach 500,000 in 2014.

"This is the first oil well out of 23 wells to be drilled as part of the first phase of developing the West Qurna Two oilfield." said Luaibi.

West Qurna 2 is the second-largest undeveloped oilfield in the world, with an estimated recoverable oil wealth of 14 billion barrels.

The field is run by Russian oil firm Lukoil, which acquired a 20-year deal to develop the field in a tender in December 2009. Lukoil is looking to boost oil output from the field to 1.8 million barrels per day in a period of six years. Lukoil gained complete control of the field after its Norwegian partner Statoil its minority stake in the field.

Lukoil is conducting drilling operations at five well pads simultaneously, at a depth of 5,000 meters for each well. Investments in the field are expected to reach \$25 billion.

Iraq's production of crude oil has been hampered by political events and circumstances, but the country is expected to be the biggest source of new oil supplied in the coming years. Iraq's oil exports are estimated to be 2.4 million barrels per day for the month of April 2012, and the country is aiming to hit 2.9 million barrels per day in 2013.

Exxon Mobil and Rosneft Sign Joint Projects Deal



Russian oil firm OAO Rosneft and American company Exxon Mobil Corp. reached a major strategic agreement last month outlining joint endeavors for the two companies.

Rosneft CEO Eduard Khudainatov and Exxon CEO Rex Tillerson signed the agreement in the presence of Russian president-elect Vladimir Putin.

"Today Rosneft and Exxon Mobil enter offshore projects of unprecedented scale." Khudainatov was quoted as saying. "In so doing, we lay the foundation for a long-term growth of the Russian oil and gas industry."

"Now we take our relationship to a new dimension. We become global strategic partners." He added.

The deal will grant Exxon access to resources in Russia's areas of the Kara Sea and the Black Sea. Exxon Mobil's expertise and technological know-how will be necessary for Russia to develop its complex arctic deposits, as Exxon expands its search for resources due to dwindling traditional sources. The venture will be two-thirds owned by Rosneft and one-third owned by Exxon, with an

initial planned investment of \$3.2 billion.

The Kara Sea alone is estimated by Rosneft to hold 36 billion barrels of recoverable reserves, a number which exceeds Exxon's total base reserves at the end of last year, which stood at 24.9 billion barrels. Investments in the Kara Sea are eventually expected to be in the range of \$200 to \$300 billion, while Black Sea investments are expected to reach \$50 billion.

Rosneft will reciprocally be offered stakes in the North American upstream sector through a subsidiary. The company will acquire 30% of Exxon's La Escalera Ranch project in Texas and a 30% stake in 20 Gulf of Mexico blocks, in addition to acreage in the Cardium formation in the Alberta province of Canada.

Rosneft shares rose slightly following the news, placing the company's value at \$75 billion.

Exxon is the biggest listed oil company in the world. Rosneft became the largest oil firm in Russia following the collapse of former giant Yukos.

India, China Remain Top Oil Importers of Iranian Crude

Mohsen Qamsari, Director of International Affairs for the National Iranian Oil Company (NIOC) was quoted confirming that China and India remain major buyers of Iranian crude oil despite rumors suggesting the contrary.

Qamsari added that China had increased oil imports from Iran in comparison to the previous year, highlighting the fact that his country was not granting discount prices to any of its customers.

He also claimed that all African and Asian buyers of Iranian oil had extended their contracts during the current year.

"While the U.S. is trying to keep oil prices high, Iran can push aside many of its rivals in the international market by supplying cheaper oil," Qamsari stated to the Mehr News Agency.

Iran traditionally sells the largest portion of its oil exports to Asian nations. Its four biggest clients are China, India, Japan, and South Korea.

India recently became the biggest importer of Iranian crude, overtaking China, following a surge in imports in anticipation of an EU embargo on Iranian oil. India imported 433,000 barrels

per day in the first quarter of 2012, compared to the 256,000 barrels per day that went to China in the same period.

India has consistently opposed the impositions of sanctions on Iranian oil exports, while simultaneously pressuring Indian refiners to decrease their reliance on Iranian oil. India was not included in a list of countries granted a waiver by the U.S. from the measures of the sanctions.

The increase in Indian imports from Iran comes due to a fear of the uncertainty that is expected to surround payments and supplies in the wake of the implementation of the EU sanctions.

Essar Oil was the biggest Indian buyer of Iranian oil in the first quarter, purchasing 142,000 barrels per day, up from 88,000 barrels per day in the first quarter of the previous year.

Iranian exports of crude oil, which have traditionally amounted to roughly 2.2 million barrels per day, have fallen as in anticipation of the sanctions. Many European companies have halted imports, slashing the amount of Iranian exports by 300,000 barrels per day to reach 1.9 million barrels per day.

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Renewable Energy

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Petroleum Ministry Compensates Families of the Suez Oil Refinery

In response to the disastrous fire of the Nasr Oil Refinery in Suez, the Petroleum Ministry has formed a committee to investigate the cause of the disaster led by Eng. Hani Dahy, head of the Egyptian General Petroleum Corporation (EGPC.)

A high-ranking source in the Nasr Oil Refinery stated that the fire reached five oil tanks, yet negated the fire reigniting two days later. He commented that the "state of fear that overcame the city of Suez was majorly due to the density of smoke that lasted for days in addition to small flame, which made citizens speculate the ignition of another fire."

Investigations revealed that a number of individuals assumed the identity of workers in the refinery and entered the company a day before the fire and remained inside, violating the safety code by not informing security as to their whereabouts.

The source added that he provided the investigative committee, which is supervised by Suez's district attorney Mr. Ahmed Abd El-Haleem, with all the information he had regarding the matter, and accused the company's security for

causing the fire inadvertently due to their negligence.

On a different note, a source from the EGPC expressed the unlikelihood of the downstream market being affected by the tragic incident, stating that "despite the destruction of several tanks, the remaining production will be transferred to a neighboring facility for storage.

The source added that the Ministry of Petroleum has decided to compensate the victims of the fire and their families and affirmed that the fire was not accident but rather deliberate arson.

The Health Ministry has declared the passing of a driver in the company after succumbing to his burning wounds, and the injury of 22 workers.

On Sunday the 22nd of April, the company's employees resumed work after a six-day holdup.

The Parliament's Industry and Energy Committee is investigating the incident as well. Vice President of the parliamentary committee, Mostafa Mohamed, stated that Eng. Abdallah Ghorab, Minister of Petroleum, will be questioned by the parliament regarding this matter.

Tension Escalates as Egypt Cancels Gas Supply Deal with Israel

Israeli officials have sought to downplay the political repercussions of Egypt's abrupt decision to cancel a 20-year gas-supply contract over a payment dispute amid deteriorating ties between the two countries.

The gas deal, signed in 2005, has emerged as a focus for public ire in Egypt. Once seen as a vehicle for corruption under the ousted Hosni Mubarak, it is now viewed as a hated symbol of the previous regime's close ties with the Zionist state.

Israeli officials initially reacted angrily to the Egyptian decision, calling it a "dangerous precedent" that could endanger the 1979 peace treaty between the two countries. However, Israel back-pedaled on its criticism of Cairo, painting the dispute as purely commercial in nature.

"We don't see this cut-off of the gas as something that is born out of political developments," the Israeli Prime Minister, Benjamin Netanyahu, said. "It's actually a business dispute between the Israeli company and the Egyptian company."

Mohamed Shoeib, head of the state-owned Egyptian Natural Gas Holding Company, said the deal was cancelled because Israel had not paid for the gas for the past four months. "This has nothing to do with anything outside of the commercial relations," he said.

Israel has rejoined that the gas supply, which at one time accounted for 40% of its needs, has been continuously disrupted in recent months.

Unknown saboteurs have blown up the pipeline in the Egyptian Sinai more than 14 times in the past year.

The decision to cancel the deal was received with extreme joy by Egyptians, with the presidential candidate Amr Moussa arguing that it was a "natural step" given the corruption that tainted the agreement. Others said that Egypt needed the gas amid shortages of its own, although an Egyptian minister said yesterday that Israel was welcome to negotiate a new contract.

As the Israeli premier dispatched officials to Cairo in an effort to contain the crisis, there were some in his government who warned that the Egyptian decision would have far-reaching repercussions. "The pretext is that this is a business dispute, but we see it as not a business dispute," said Uzi Landau, Israel's Energy Minister, warning of power shortages this summer and signaling worse to come. The Finance Minister Yuval Steinitz described it as a "dangerous precedent that diminishes the peace treaty".



Orascom Signs \$363m Power Plant Deal with Iraq

Orascom Construction has signed a \$363 million power deal with Iraq's electricity ministry to build a 1,014 megawatt gas power plant in northern Iraq.

The contract involves building a plant in Baiji, 180 km north of Baghdad, to install six gas units, each with a capacity of 169 MW, which Iraq bought from Siemens in 2008. The project is expected to be completed within 21 months, officials have said.

Since the U.S.-led invasion that overthrew Saddam Hussein, Iraq's national grid still supplies only a few hours of power each day. Intermittent electricity is one of the public's top complaints.

Iraq plans to boost the grid's capacity by about 1,500 megawatts in the next few months and to add 22,000 MW of production capacity across Iraq, except for the semi-autonomous region of Kurdistan, by the end of 2015, the electricity minister has said.

Iraq's power availability has ranged between 7,000-8,000 megawatts but is due to increase to 9,000-9,500 MW this summer as some power projects come online and others are upgraded.

Innovative Canal-Mounted PV Plant in Gujarat, India

The Gujarat state of India, known as a leading state in the field of renewable energy, has officially witnessed the inauguration of an innovative solar photovoltaic plant mounted on the 19,000 km-long network of the Narmada canals.

The plant was inaugurated by Gujarat's Chief Minister, Narendra Modi. It is stretched across a 750-metre

area of the canal at Chandrasan village in the Mehandra district, and will have a power production capacity of 1 MW

The project is also expected to prevent the evaporation of approximately 900,000 liters of water from the canal every year.

"We have always believed in using technology to save our natural resources and at the same time create energy to power our industrial, agricultural and social development. This is just a first step towards giving energy security for future generations," stated Gujarat Energy and Petrochemicals Department Principal Secretary DJ Pandian.

The Gujarat State Electricity Company was in charge of developing the project, with support from the agency that built the canal, Sardar Sarovar Narmada Nigam. Usbased solar developer SunEdison was responsible for engineering, procurement and production of the plant.

An estimated 2.2 MW of solar energy-generating capacity can be produced from 10% of Gujarat's canal network. This would conserve 20 billion liters of water annually, in addition to preventing the usage of 45 square km of land.

IEA Urges Governments to Accelerate Clean Energy Implementation

The International Energy Agency has issued a statement claiming that the majority of clean energy technologies are not being deployed quickly enough despite sufficient technological advancement.

"We have a responsibility and a golden opportunity to act," said IEA Deputy Executive Director Ambassador Richard H. Jones. "Energy-related CO2 emissions are at historic highs; under current policies, we estimate that energy use and CO2 emissions would increase by a third by 2020, and almost double by 2050. This would likely send global temperatures at least 6°C higher. Such an outcome would confront future generations with significant economic, environmental and energy security hardships – a legacy that I know none of us wishes to leave behind."

The IEA statement is related to a report issued by the Clean Energy Ministerial in London, which tracks the usage of clean energy technologies.

The report reveals that has grown at a rate of 42%, while onshore wind has witnessed growth of 27% every year for the past 10 years.



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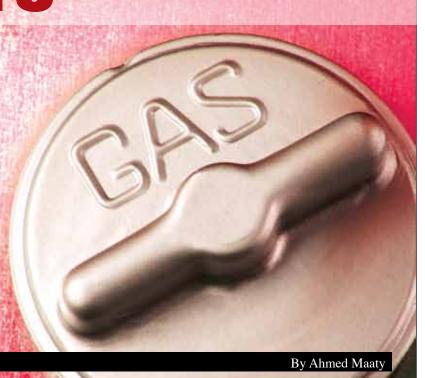
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EPOlitical Review

Smoke and Mirrors

The Cloaked Reality of Halting Gas Exports to Israel

Egypt's sudden decision to cease exportation of natural gas to Israel owing to an alleged financial dispute is almost certainly politically motivated. While it may seem to be a simple populist push on the surface, the move and the intricacy with which it was executed betray more intricate political considerations. Evidence points to an expertly calculated political maneuver carried out under the cover of a controversial and ripple-inducing shock headline.



he events of 2011 in Egypt have yet to earn the label 'revolution' beyond doubt or argument, but there can be little argument that substantial changes have taken place in several aspects of Egyptian politics. One such change was the decision to revise extant natural gas export agreements, often deemed corrupt and shameful, in order to ensure that the export price is more in line with fair global pricing and thus more advantageous to the Egyptian state.

Due to it being the most highly sensitive, it was logical to expect that the agreement governing gas exports to Israel would be the most harshly scrutinized. However, few can claim to have expected the deal to be scrapped entirely, especially at such a volatile point in time, and under the auspices of an entity whose official authority is meant to be temporary.

The fact that such a monumental step came during the ruling tenure of the Supreme Council of the Armed Forces (SCAF) was all the more surprising given the fact that the SCAF's main responsibility is to steer the country through the so-called transitional period. It is impossible to contend that a decision with such significant ramifications was taken without at the very least the knowledge and approval of the country's executive authority.

Exporting natural gas to Israel is often counted by the Egyptian public among the Mubarak regime's most heinous crimes. General perception regarding the much maligned agreement was that the state was supplying an enemy country with natural resources at a price so favorable it seemed absurd. The regime's insistence on maintaining such an agreement in place despite such popular discontent is revelatory of the nature of the deal itself. Far more than being a simple economic transaction, the political and security dimensions of the deal and their implications on for the Egyptian state as it existed under Mubarak meant that the status quo was essential to the stability of the state.

Cancellation of the deal at such a key time in Egypt's political history can thus only have been green-lit following an evaluation and full understanding of the political consequences such a move would entail. It would thus seem that it is the intention of the SCAF to undertake a significant shift in foreign policy, but a closer analysis of the agreement, the consequences of the decision, and the SCAF's role and history as a political actor suggest otherwise.

The decision has made headlines and stirred controversy, all the more due to its sudden revelation, which was most probably the intended result. The careful wording of all official statements and the fact that the SCAF has yet to openly claim a populist victory reveal intricate calculations implying a move that is far more limited than would initially seem.

The specifics of the actual deal support the notion that the decision is more political in nature than economic, as the agreement itself contradicts much of what has been announced and raises significant questions regarding the decision and the extent to which it is legal, sustainable, and sincere.

The Agreement

The agreement, which was concluded in 2005, is generally known to have secured the export of 1.7 billion cubic meters (BCM) of natural gas per year from Egypt to Israel at a fixed price. The Memorandum of Understanding signed by the government of Egypt in 2005 reveals the actual number to be 7 BCMs of natural gas, a staggering figure which accounts for almost %50 of Egypt's total natural gas exports as of 2009. The price, which was never disclosed, is alleged to have been far below global market prices and not adherent to any fair pricing scheme.

In light of these facts, it would be unreasonable to assume that the agreement was purely economic or financially-motivated from the Egyptian side, if only because it does not make economic sense. A history of conflict between the two countries, coupled with Israel's volatile political situation as a result of constant tensions with its neighbors, entail a significant geopolitical dimension to the agreement. Economic integration and cooperation are a hallmark of the security policies of both the Israelis and their American allies.

To this effect, the deal created a rigid economic bond between the ruling regime in Egypt and the Israeli state by placing a gargantuan economic obligation on the former towards the latter. This would serve as both an instrument of strengthening Egyptian-Israeli relations on the state level (if not on the popular level), and as leverage in the process of ensuring Egypt's foreign policy alignment does not stray from the American-Israeli camp in a region where alliances can be fickle.

The agreement was also instrumental to Israeli energy security, providing the Jewish state with 40% of its needs of natural gas, the country's number one source of energy.

Recent discoveries of natural gas in Israeli waters have been so substantial as to cast doubt on the importance of Egyptian exports in the long-term, but at the time of the agreement, no such wealth was available to Israel.

From the Egyptian perspective, the deal ensured that a historically hostile state with superior military capabilities and greater political clout was kept partly dependent on Egypt, thus dissuading it from taking confrontational action. Moreover, the agreement was a symbol of the co-operational (if unbalanced) relationship between the two states, further reinforcing stability and decreasing the likelihood of conflict or tensions on the border. This relationship was a pillar of security and stability for Egypt during Mubarak's rule, key tenets of his regime's foreign policy.

As such, the export agreement was more of a geopolitical asset for the Israelis and a security mechanism for Egypt than it was a simple natural gas export deal. It was both a symbol and an integral component of the complex but highly functional relationship (for the ruling regimes) that had developed between the two countries since the end of the war and the 1979 peace treaty. In fact, the Memorandum of Understanding recalls Annex III of the peace treaty, which determines economic cooperation essential whenever possible in order to maintain the peace.

The Memorandum of Understanding goes further in illustrating the true political nature of the export deal. Sameh Fahmy, at the time Minister of Petroleum under Mubarak, had signed the Memorandum on behalf of the Government of the Arab Republic of Egypt. The Memorandum states in Article II that Egypt is to guarantee "continuous and uninterrupted" supply of natural gas to Israel for the following 15 years through EMG. It goes on to add that "the same guarantee shall be applied to any other entity importing Gas from Egypt to Israel." Article 7 of the Memorandum confirms that the responsibility of guaranteeing supply in fact lies with the Egyptian government regardless of the company through which the transaction takes place.

This means that the decision to end the EGPC and EGAS's contract with EMG does not relieve the government of Egypt of the duty of guaranteeing natural gas to Israel in the quantities dictated by the memorandum, meaning that the true deal is essentially between Egypt and Israel as states and not between private companies or even states and private companies

mere intermediaries, deemed disposable and subject to change by the agreement.

The official explanation regarding the termination of the contract, which simply involves a financial dispute with EMG due to unpaid dues, is thus inadequate in fully explaining the decision, seeing as how its legality would be in question. While a Memorandum of Understanding is not necessarily legally binding in international law, it may be considered to be so depending on its exact wording. This means that a unilateral abrogation of the memorandum will leave the Egyptian state in a legal mire. This is in addition to the immense political weight of the decision, if it is to be in fact permanent, which is left entirely unaddressed by the official line.

Bold Step?

Considering the political nature of the deal and the sensitive geopolitical balance it maintains, not to mention the legal obligations it arguably entails, it would seem that the decision to cut gas supplies is not a particularly safe or necessary one for the Armed Forces as a political actor. After all, the agreement was hated but tolerated, and there was no particularly strong wave of public discontent aimed towards it at this specific point in time.

The possibility of a radical switch in foreign policy orientation is also highly unlikely given the fact that such a switch would not appear to be in the interest of the Egyptian armed forces. The Egyptian army's leadership is also widely known in foreign policy circles to be conservative and resistant to change, and triggering conflict with Egypt's Western allies would hardly be consistent with this mindset. In terms of foreign relations, this move can only be perceived as tactical sleight of hand.

The Generals may be eager to remind the world just who holds the reigns of power in Egypt as politicians and media worldwide look to the Muslim Brotherhood for a hint of Egypt's future. Tensions with the U.S. and Israel in particular have fluctuated since the uprising, at times reaching levels unseen for decades. The cut may simply be a wake up call to remind the U.S. and Israel just who has word over their interests in Egypt, and may be followed by a resumption of gas exports at a more reasonable price as suggested by Minister of International Cooperation Fayza Abou El Naga.

In the same vein, the decision may have been an attempt to re-write the rules of the game. The ouster of

as has been constantly suggested. The companies act as Mubarak and his regime has inevitably and irreversibly resulted in a more active political role for the Armed Forces in post-revolutionary Egypt. While power is to be handed to civilians in the very near future, the Army is not expected to relinquish all authority anytime soon, official or not. As overseers and potential future kingmakers in Egypt's future political theater, the Armed Forces would be the entity to deal with when it comes to the most sensitive and serious of geopolitical matters. Such a bold step as cutting gas exports to Israel could be a shrewd exploitation of the regional events, a message to the Israelis that Egypt and its Armed Forces are now to be dealt with as equals rather than subordinates. A new, tougher-priced agreement would convey a balanced stance regarding post-Mubarak Egypt's standing towards Israel, at least from the Army's perspective.

As with all news pertaining to Egypt in recent times, however, one should perhaps give priority to internal struggles. During its ruling period, the SCAF has shown a tendency to spark tension and use inflammatory rhetoric in the international arena in order to produce a desired effect on the domestic scene, only to re-stabilize matters again once the intended result has been achieved. This was perfectly demonstrated during both the NGO/ foreign funding debacle and the border terrorist attack dispute with Israel. As such, the SCAF's foreign policy decisions, particularly those that seem loaded with controversy, must be analyzed primarily through the lens of domestic politics.

The primary determinant of the Egyptian political scene as of late has been the relationship between the ruling Supreme Council of the Armed Forces and the Muslim Brotherhood, as the struggle between the two parties moves increasingly away from the framework of competitive cooperation established after the exit of Mubarak. The Army and the Brotherhood have found several stumbling blocks in the preliminary deal struck (directly or implicitly) between them, and tensions have caused the relationship to edge ever closer towards direct political confrontation.

The Brotherhood is attempting to re-position itself to attain maximum gain in as short a period as possible, pouncing on every opportunity to enlarge its bid for power. The Army seems unnerved by the Brotherhood's increasingly reckless power-grab and is moving to curtail the group's influence and block their political maneuvers. The presidential race, the constitution-writing process and the dispute over the government have all amply demonstrated the souring of the relationship and the unwillingness of either side to compromise.

The unpopular natural gas deal is thus the perfect chance for the Armed Forces to gain political credit and embarrass the Brotherhood. It is impossible for the Islamist group to criticize the decision to end the deal on any basis, legal or not, lest they be perceived as unpatriotic in comparison to the current rulers of Egypt. It is simultaneously impossible for them to lay claim to any of the credit, to the contrary of the Army, which does not need to claim that which has automatically been attributed to it.

The status of the Army in Egypt's future political framework, and the speed with which they hand over power completely, will both be affected by the move, a move which the Brotherhood simply does not have the authority to match. Consequences both legal and political will take time to come to the fore, and the Armed Forces are preparing to hand all official power to civilian institutions and retreat behind the curtain, meaning that they may reap all of the returns and let their successors pay the bill.

As a matter of fact, the Muslim Brotherhood, which is primed to become the most prominent political force in Egypt in the wake of the Army's withdrawal from power, may find itself facing a dilemma of significant proportions. Legal and international pressure will force them to reconsider the cut, but the public backlash that would result from a reinstatement of natural gas exports to Israel would make such a step equally dangerous.

This ensures that the Armed Forces exit the scene with a significant political advantage lest the Brotherhood attempt to marginalize the Generals entirely. It guarantees that those who will come to power will not find themselves in a position comfortable enough to embolden them to attempt a monopolization of authority, and even leaves the Army's leaders with a possible window of opportunity to reverse the handover of power should it be deemed necessary.

The shocking news that Egypt has ended natural gas exports to Egypt has left the situation unclear on both the local and international levels. Far from being a shift in policy, however, the move suggests a shrewdly calculated political game, one which is likely to end, albeit on revised terms, when it bears its fruit.



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E Field Trip

Visiting Suez Oil Company

Zeit Bay and Ras Budran Concessions

In keeping with our policy of always aspiring to bring the sector's most pressing issues to the surface and report the news from the ground, Egypt Oil & Gas was invited by Eng. Nabil Ali Zaki, Chairman of Suez Oil Company's (SUCO,) to visit two of the company's development concessions, namely Zeit Bay and Ras Budran, which are located in the Eastern Desert and the Sinai Peninsula respectively.

Founded in 1979, SUCO is a joint-venture company between the Egyptian General Petroleum Corporation (EGPC) and the German RWE DEA. The company owns three major development leases (Ras Fanar , Zeit Bay and Ras Budran.) In addition to its main development fields, SUCO has also been developing the North Idco field in the Mediterranean.

SUCO is currently expanding its 2011-2012 drilling operations as well as intensifying the development of its preexisting fields. During the previous fiscal year 2011-2012, the company successfully drilled 16 wells. Last March, the company's production numbers of stood at 537,119 barrels of crude

oil and 50,383 cubic feet of natural gas. In Ras Fanar field, SUCO drilled 14 wells, most of which are situated west of Ras El-Fanar, contributing 50% of the field's crude production. The company also completed two new wells in Ras Budran.

production manager of SUCO's Zeit Bay development lease, which is located 80 kilometers north of Hurgada, the company owns 19 developmental wells, 10 of which are offshore, with an aggregate production rate of 4850 barrels per day. In addition, 4 onshore wells are currently being maintained in preparation for secondary recovery using the Weatherford 104 rig, with the target of raising their output by 500 barrels per day.

Out of the 19 wells, 11 produce using the method of gas-lifting, while the remaining 8 naturally flow with no need for artificial lifting. The company also owns 5 wells that contain high levels of associated gas, which is used in in the artificial lifting of the aforementioned 11 wells.

Once production starts from the 4 wells being maintained, production is estimated to reach 5500 barrels per day. Two of those wells are being sidetracked, being drilled diagonally targeting a deeper formation.

When asked about the average cost of producing a barrel, taking in consideration overhead cost, Eng. Talaat Mahmoud, gave an estimate of \$9.60.

SUCO's Zeit Bay neighboring concessions, such as that of PetroAmir's, uses SUCO's facilities for treatment and shipping of its production. The cost of these operations is determined by the EGPC. The use of SUCO's facilities by neighboring, relatively According to Eng. Talaat Mahmoud, new, companies is regulated by both SUCO

and the EGPC, as a way to cut on cost. Eng, Mahmoud explains, "Its very costly and almost pointless for the neighboring companies to build their own treatment facilities, and it is in the interest of every party involved to use the existing facilities since it optimizes two of the most significant elements in the any production

operation; time and cost.

By Ahmed Maaty, Mohamed El-Bahrawi

The company's current wells are quite mature; approximately 80% of the wells' resources have been extracted. However, the company relies heavily on artificial lifting in order to maximize the output of those nearly-depleted fields.

SUCO is preparing to offer a tender for an offshore rig starting the next fiscal year (2012-2013.)











SUCO's Gas Plant at Zeit Bay Development Lease

SUCO's Gas plant at Zeit Bay was established in 1987, with the objective of boosting the output of the company's oil wells through Gas injection. Eng. Adel Mohamed Abdel Rahman, Manager of the Gas plant, explained that in order to maintain pressure and thus productivity in wells, Gas is injected at high pressure into the well for improved oil recovery. Some of the components removed from the gas prior to its use in secondary oil recovery are useful, and so are isolated in the plant.

In order for this to be achieved, associated gas is acquired from the concession's crude production, pressure is lifted from the gas and impurities such as water are removed from the gas utilizing Glycol, after which it is cooled via Propane. Gas is cooled to -25 degrees Celsius, resulting in certain condensates such as Ethane and Propane and Butane which go through fractionation towers.

This produces Liquid Petroleum Gas (LPG) through the condensation of C3 and C4 gases, which is stored in tanks with a 1,650-ton capacity. 130 tons of natural gas per day are pumped to GUPCO's 104 station 38 km away, through which they go to either Cairo's Qatameya LPG plant or to Assiut, to be distributed across the

country

Following the isolation of condensates, a portion of the remaining gas is used as fuel gas to power machinery in the plant such as turbines as well as in the oil and gas heating process. Another portion of the gas is re-injected into the oil wells. 15 million cubic feet of natural gas are also introduced daily by the plant into the national gas grid via GUPCO.

Gases that are heavier than LPG are provided to Petrogulf Egypt to inject into crude oil in order to enhance the quality of the oil. This rise in quality raises the general price of crude oil.

Eng. Abdel Rahman was keen to assure that excess gasses are not burned by the company, as this is forbidden by law for environmental reasons. This is also the motivation behind using gas as fuel in the company's operations, as it produces fewer emissions. Gas is also used in flares as an emergency mechanism, in order to burn leaked gases

In addition to using associated gas from SUCO's crude oil production, he revealed that the plant receives 20 million cubic feet of gas from AGIBA and 3 million from Zeitco. The plant's production is 140 tons of gas per day, 135 of which are shipped. SUCO contributes

35 million cubic feet of gas to be injected into its wells to maintain productivity, and 15 million to be injected into the wells of neighbors AGIBA. The plant is to receive 10 million cubic feet of gas from Petroamir, which is expected to raise production by 15-20 tons of LPG and 80 barrels of condensates per day. This will cause production of condensates to reach 600 barrels from the current 520.

The plant is designed and equipped with maximum safety precautions in order to minimize accidents and hazards. Man-entry certificates are issued based on oxygen percentages for entry into any area, and electric equipment is also operated only after a certificate is issued. In case of shut down or emergencies, the plant is equipped with the Programmed Logic Control (PLC) system, which responds to the situation automatically in conjunction with safety monitoring systems. There is a human response system for fires and accidents in case of failure of this system. Storage tanks for LPG are also outfitted to immediately sense and signal leaks.

He also confirmed that the EGPC maintains full oversight over the plant and issues instructions pertaining to its management, owing to the fact that SUCO is one of the EGPC's joint-ventures.









Efield Trip

Zoser: One of Ras Budran's Offshore Rigs



SUCO aspires to maintain the highest standards of health and safety in their operations, and has consistently been among the industry leaders in this field. It is the responsibility of the company's HSE department to ensure that these standards are consistently met and that the company's HSE policy is strictly implemented. This policy is decided by the highest executives in the company, and a separate budget is allocated for its sake.

SUCO to preventing any injuries and adverse health effects from work activities, and to complying with all legislation relevant to HSE. It also reaffirms the company's commitment to avoiding property damage and efficiently using natural resources and energy, in addition to following international oilfield standards in the design, construction and operation of SUCO's plants and equipment.

The policy also conveys the company's

insistence on relying on reviews, risk assessments and regular auditing and on investigating incidents and accidents as promptly as possible, as well as minimizing waste of all types. A desire to co-operate with neighboring companies in technical information and support studies is also stated. Furthermore, the policy demands that both employees and contractors apply

As a means of reinforcing the company's The policy expresses the commitment of HSE standards, external auditing is also practiced, so as to allow an outside party to confirm SUCO's HSE credentials and suggest improvements. Auditing is done through international agencies such as the DNV, which awarded SUCO its DNV Level 7 certification, the first time it was awarded in Egypt.

> The company was also granted the ISO 14001 certification and the OHSAS 18001 certification, both of them internationally recognized benchmarks of HSE. These

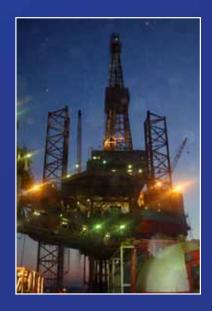
certifications are not permanent, but are rather constantly followed up on. Anomalies are noted and the company informed, and there is a risk of losing the certification if major anomaly is not resolved.

No major anomalies were ever encountered during an audit at SUCO. Sewage release and radioactive levels are also monitored internally and externally in order to ensure optimum HSE conditions. Fires are also completely accounted for, as there is a dedicated fire extinguishing unit present at SUCO's Zeit Bay concession, in addition to automatic response systems utilizing foam and cooling devices.

Maintaining high HSE standards and acquiring certifications affirming these standards is important to SUCO for several reasons. It affects not only the company's costs, image and corporate integrity, but has a significant effect on insurance costs as well.

SUCO's HSE manager at Zeit Bay stressed

the importance of proper training in all areas of work, both related and non-related directly to safety and health, in order to preserve HSE standards.



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Coping with the Zeitgeist Seeking Solutions for Tomorrow's Inevitable Complications

Over the past decade, the development of Egypt's hydrocarbon resources has seen a significant quantitative rise. Investors lay their aggressive exploration and development strategies, and through intensified campaigns, they strive to achieve their desired targets. However, hydrocarbons are and will always be a non-renewable source of energy, which means the diminution of its resources, is inevitable. Egypt's extant conventional petroleum resources are on the verge of depletion, and experts estimate another five to six years before Egypt's finds itself at a juncture that necessitates the implementation of radical changes to the current regulatory framework to be able to resume upstream activities.

By Mohamed El-Bahrawi

he majority of exploration and development operations in Egypt are concentrated in three geographical areas, namely the Gulf of Suez, the Nile Delta and the Western Desert. These areas have been producing both oil and gas for decades, and in spite of their current production levels, their reservoirs are on the fast track of progressive depletion and eventual exhaustion. Unanimously, investors consider the development of the Mediterranean's hydrocarbon resources to be the only logical step forward.

Developing these new prospects is an extremely difficult task in itself and the rigidity of the current Egyptian agreements model, the Production Sharing Contract (PSC), adds an array of obstacles to an already complicated venture.

Limitations of the PSC Model in Exploration

At the forefront of the PSC restraints is the subject of cost recovery, an issue that continues to haunt the investor. Despite assumptions of all risk associated with exploration due to the terms of the PSC, the government's involvement (represented in the EGPC, EGAS or GANOPE) is present from day one.

BP's Exploration and Agreements Consultant, Mr. Samir Abdelmoaty, describes the complications that

arise from the extent of government involvement, "When an investor is awarded a concession, he submits a letter of guarantee to the government, covering the estimated cost of the exploration operation. In addition, he has to obtain the government's approvals on the budget and work program of the exploration venture." In the case of leftover capital from the agreed-upon budget for exploration (shortfall), it is paid back in cash to the government.

Operating under the assumption that a discovery will be found and commercialized, the investor would technically be spending the government's money on exploration.

Limitations of the PSC Model in Development

Once the discovery is in the development stage, the investor begins recovering the cost of the exploration operation.

Here is where the issue becomes complicated; the government has several conditions to approve cost recovery, some which can sometimes limit the scope of what the investor can and cannot do.

All services have to be chosen through tenders; the investor has to contact all companies registered with the EGPC, create a shortlist of successful technical

bidders, and then financially assess every offer and choose the most economical one. The investor must then obtain approval for tender documents and list from the EGPC, offer the tender, and assess the offers in the presence of the committee from the EGPC.

Each party conducts its technical evaluation agreement on a list of qualified bidders. Finally, both parties choose the company according to the most economical financial offer.

In this process, the technical assessment is usually a difficult and time-consuming negotiation. The investor sets certain technical specifications that can sometimes only be found in one bidder. The government however requires the investor to have more than one bidder to choose from, even if they do not meet the requested technical specifications.

Cost Recovery is usually paid from the production of the discovery, which is considered national capital. Hence, it goes through several rounds of auditing from the EGPC and the Central Auditing Organization (CAO), who meticulously review every spending to make sure it is cost-effective. Furthermore, any expenditure has to be approved by the government, even if it's worth a meager \$1000. This thick bureaucratic procedure is very time-consuming for the investor, which translates into financial loses. Matters could become worse if there are differences on technical matters between the investor and the government, leading to further delay of obtaining approvals.

The government imposes a ceiling on the salaries of employees, which is quite counterproductive when seeking highly skilled labor in a global industry. Egyptians for example have a certain fare that, if exceeded, is excluded from the cost recovery.

Every bill is audited by the EGPC and often times there are disagreements between what the investor believes is needed versus the opinion of the EGPC. Sometimes officials are reluctant to grant approvals and thus resort to forming a committee, which has to unanimously approve the request. If the decision is not unanimous, the request is rejected.

Mr. Abdelmoaty comments, "Cost recovery has become an extremely long and time-consuming process for both the investor and the government. There are full departments on each side whose sole responsibility is working out the intricacies of cost recovery ... for the investor, time is money, and the time spent in recovering operational cost ends up

costing the investor more." Why Eliminate Cost Recovery?

Zero cost recovery is not a new issue. It has been exhaustively discussed numerous times before. One option is using a hybrid model, one that combines both aspects of the PSC and the Tax Royalty systems. For example, instead of paying the investor 30% or 40% cost recovery in addition to the 20% to 30% profit-split, the equation can be readjusted where the investor assumes all the cost, but also reaps all the profit.

Other experts favor shifting the system to Tax Royalty completely, especially in the cases of deepwater exploration and development; these operations require highly sophisticated technologies that exist on a very small scale in Egypt.

Deepwater and deepwater horizons, especially High Pressure High Temperature (HPHT) targets, are extremely problematic and incredibly expensive.

The nature of the Mediterranean's reservoirs is different from those located in the Western Desert or the Gulf of Suez. They are narrow channels that require drilling a multitude of wells vertically to extract the maximum amount of natural gas.

Moreover, HPHT targets require special equipment that can sustain the extremely high temperature and pressure; these tools and technologies are exceedingly expensive. Therefore, seeking approvals through the bureaucratic channels for such pricy equipment and technologies is simply unsustainable under the PSC model, which is why it needs to change.

The government has to encourage investors to utilize new technologies, which are usually expensive. Obtaining approvals of such technologies is a difficulty for the investor; if the official has technical background and understands the significance of the technology, he will no doubt approve it. But if he is viewing the issue from a monetary perspective, he is likely to deny the approval.

According to Mr. Abdelmoaty, "There is no fixed standard for such approvals; it usually depends on the individual granting the approvals at that specific time ... the current agreement model needs to be amended because the majority of the problems are results of cost recovery."

Benefits of Various Agreement Models

The aforementioned hybrid model was applied before, where the government allowed the investor to bare the costs of E&P in exchange for a share of the production. The investor would extract the hydrocarbon and the government would buy it at a specific price.

After estimating the reserves of the reservoir and the cost of production, the investor calculates the needed Internal Rate of Return (IRR) and accordingly decides on a price for the gas. Four years in, the investor returns to the price negotiation table, assess the actual cost of operations, the actual reserves of the reservoir and accordingly modify the price.

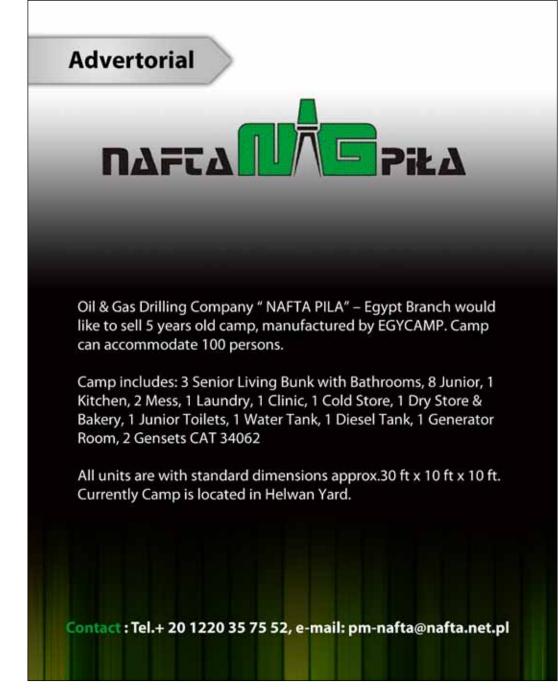
If the operation cost is more than estimated, the price then rises and vice versa. Same with the estimated reserves, if they are higher than initially assessed, then the price is dropped.

The government can allow the investor freedom yet set strict deadlines for delivery of production to deliver a specific amount; if none of the deadlines are not met, penalties can be imposed, which could reach the loss of the concession if need be.

When investors take on the full operation of exploration and production, they can benefit from the global deals they have with services companies rather than going through tenders that favor low cost over quality. Moreover, HPHT requires very skilled labor that is not available everywhere, and recovery of HPHT cost is simply unrealistic due to how expensive these operations cost.

A high-ranking source in the EGPC explained the current model of agreements cannot be modified simply since it has its roots in the law, which is the parliament's prerogative. Any radical changes to the model are not likely to be approved due to the inexperience of the Parliament's Energy Committee. The source gave an example of a recently discussed bill in the parliament intended to raise taxes on the investor, which was later dismissed because it would negatively affect the Egyptian government more than the investor.

The PSC has been a tremendously successful model for a long time and still remains. However, there are cases where the PSC model is simply unsustainable. Looking forward, the number of those cases will inevitably increase, which is why the government should be amenable to alternative solutions, ones that balance and maintain the sovereignty and right of the state while allowing the investor more freedom to operate more efficiently.



By Weatherford

SandAid™ Sand Conglomeration:

Higher sand-free flow rates, Reduced water production.

On the 12th of April 2012, EGAS hosted a seminar introducing Weatherford's latest SandAid™ Sand Conglomeration Technology. Presenting the technology was Rami Hamad, Weatherford's MENA Region Business Unit Manager. The seminar attracted the attendance of several petroleum companies such as PHPC, Wastani, Melrose, Rashpetco, Bapetco, Dapetco and Khalda Petroleum.

eatherford's New approach to sand control increases the maximum sand-free rate (MSFR) to boost total reservoir performance. SandAid sand conglomeration technology is a one-of-a-kind patented chemical that simultaneously increases the bond between particles, reduces water cut, and traps fines to increase maximum sand-free rate and reduces water production. This unique technology is another big advancement in production enhancement and sand management from Weatherford.

Tested in more than 30 wells, SandAid sand conglomeration technology has provided lasting effectiveness in every single case. It increased sand-free flow

rates in every case for periods exceeding 16 months. Maximum sand-free rates increased as much as 50 percent, and water cut was reduced up to 60 percent.

The benefits that can be realized include reduced lifting costs by increasing sand-free rates and reducing water production, increased production rates by preventing fines migration and near-wellbore damage and keeping perf tunnels open to reduce skin damage.

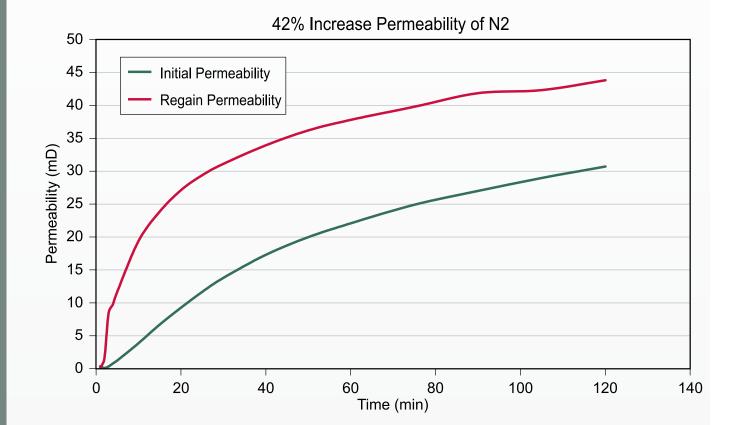
In addition, the new technology contributes to the reduction of erosion and corrosion damage to tubulars and surface equipment by more effective sand and water control. It will also reduce the need for frac packs by preventing perf tunnel collapse and intermixing formation sand with gravel- pack sand thus enabling more effective high-rate water packs.

SandAid Adapts to changing reservoir stress conditions by remaining ductile and its reconglomerating capability. It can be simply applied due to the flexibility in mixing with power-law and Newtonian fluids, resulting in the treatment of long intervals (up to 16 months and counting.) Under-displaced SandAid chemistry is simply produced out of the well, unlike resin- or epoxy- based solutions. Last but not least, rigorous core tests confirm improved permeability with no compatibility issues.

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For more information contact us at **sandcontrol@weatherford**.com or visit us online at **weatherford.com/pcs** for stimulating ideas for production improvement.

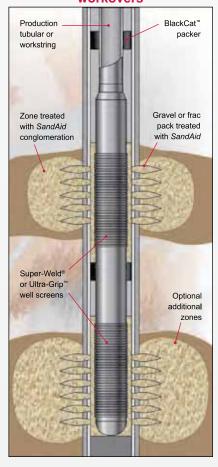


SandAid sand conglomeration applications.

Remedial UltraPak™ or service packer Zone treated with SandAid conglomeration Perforations Optional additional zones

SandAid sand conglomeration reduces sand and water production. In existing wells it can be pumped through coiled tubing or thru-tubing.

New wells and workovers



Other SandAid applications

- Fines control: reduces fines migration, flow cutting and enhances wellbore stability.
- Water control: modifies the relative permeability, reduces water cut and enhances hydrocarbon production.

 ${\it SandAid}$ sand conglomeration can be used as a pre- or post-treatment for:

- Preventing intermixing of gravel-pack sand with formation sand during a high-rate water pack
- Stabilizing the perforation
- Reducing need for frac packs

Corporate Perspective

Opportunities for Oil & Gas Service Companies in Africa -2012 and Beyond

Libya is focusing to reach the oil and gas production of pre-revolution levels soon. Ghana Authorities are building the needed infrastructure for their Oil & Gas new finds

By Dr. Abo Bakr Radwan, Vice Chairman, Petrographics

Africa is the world's second largest and second-most-populous continent of 54 fully recognized sovereign states with an estimated population of more than 800 million people. The upstream oil industry is key to the continent of Africa. According to the 2008 BP Statistical Energy Survey, Africa had proven oil reserves over 120 billion barrels at the end of 2009 or close to 10% of the world's reserves. Five countries dominate Africa's upstream oil production. Together they account for 85% of the continent's oil production and are, in order of decreasing output, Nigeria, Libya, Algeria, Egypt and Angola. This article shall focus on two countries in Africa, one a major oil producer, Libya, and the other is emerging to be a player in the oil production, Ghana.

Libyan oil and gas production has reached over 70% of pre-revolution levels and

the quantity is increasing on daily basis, according to Libya's Deputy Minister of Petroleum, Libya is producing over 1.35 million barrels of oil a day. Libya's stateowned National Oil Corporation (NOC) said that the country's crude oil exports are forecasted to grow to 1.29 million barrels per day .Oil exports are also expected to reach 1.33 million barrels per day. It also said that it plans to sell 30 million barrels of May's production, whereas 10 million barrels would be taken by companies that receive oil for investing in Libyan production.

Opportunities in Libya for Egyptian Oil & Gas service companies are great, especially with the growing cooperation between the two countries. Facilities are now being managed by Libyan engineers and workers, which is a great plus for Egyptian contractors to work with the well trained Libyan work force, and in the



training young Libyan professionals.

Petrographics has established a branch office in Libya in 2000, which employs 80% of the workforce as Libyan professionals. Petrographics will be continuing the operations starting near the end of the second quarter with many of the oil & gas producers.

Ghana is a new comer in the industry, with finds in the Western Region. The country is expecting 120,000 barrels per day and 120 million cubic feet of gas per day in phase one, according to Dr. Kobena Donkar.

mean time employ a training program for Deputy Energy Minister. The construction of the oil services facilities has already started to meet the needs for immediate infrastructure.

> There are hardly any technical service companies in Ghana. Most of the work is done outside the country. Therefore, Petrographics saw a considerable opportunity to establish a branch company in Accra, providing this vital service in Data Management, Seismic Data Processing, and Reservoir Characterization. Other service providers will have a sizable operation that will need their services as well



wide range of Fugro's specialist survey services are delivered to the Egyptian oil and gas market.

On completion of a recent upgrade that included the installation of a DP system, the M/V Furgo Navigator took on a new challenge of undertaking a preengineering survey in deepwater utilising an ROV fitted with a full suite of geophysical sensors.

Survey data were required for the design of 200 kms of subsea

Nile Delta.

The high resolution multibeam echo sounder and geophysical data revealed a seabed consisting of unstable soils and severe gradients. Telecom cables and control umbilicals that ran across the site were identified and mapped, these would not have been identified by traditional towed survey systems. This critical information was used for route selection and design.

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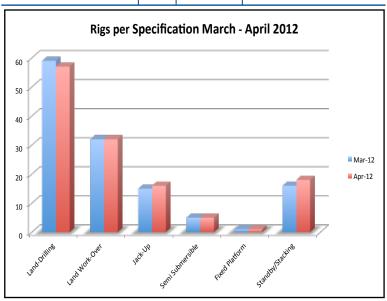
Fax: +20 (0) 2 2758 0599 Telephone: +20 (0) 2 2758 0299 Address: 17, Port Said St., Maadi Al Sarayat, Cairo, 11431, Egypt

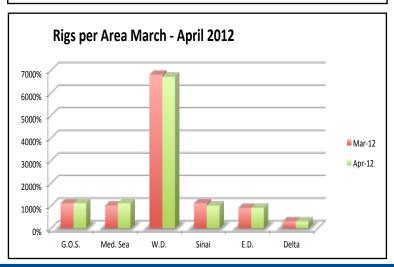
EIndustry Statistics

Egypt Statistics

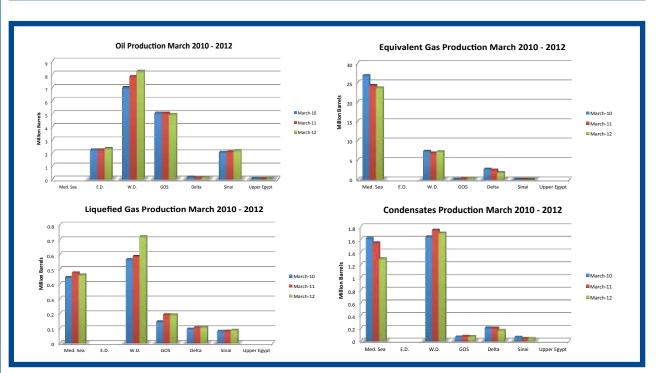


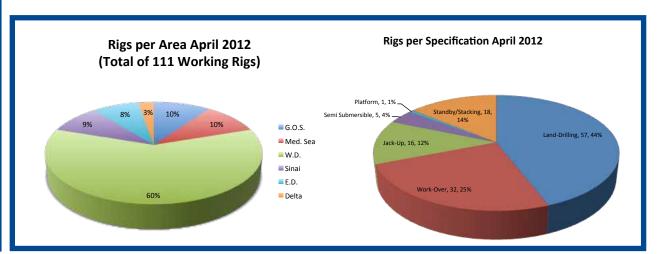
Table 1 Egypt Rig Count per Area – April 2012												
RIG COUNT												
Area		Total	Percentage of Total Rigs									
Gulf of Suez Offshore	11	11	10 %									
Land Mediterranean Sea		4.4	40.0/									
Offshore	11	11	10 %									
Land Western Desert		67	60 %									
Offshore	67	o,	33 75									
Land Sinai	67	10	9 %									
Offshore Land	10											
Eastern Desert		9	8 %									
Offshore Land	9											
Delta Offshore		3	3 %									
Land	3											
Total		111	100%									

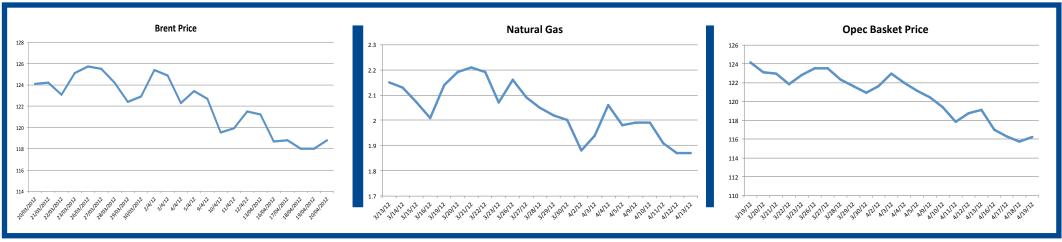




	Oil			Equivalent Gas			Condensate			Liquefied Gas		
	Barrel			Barrel		Barrel			Barrel			
	March-10	March-11	March-12	March-10	March-11	March-12	March-10	March-11	March-12	March-10	March-11	March-12
Med. Sea				26798000	24277857	23616071	1616256	1541094	1290083	443699	474514	460496
E.D.	2223211	2224083	2326834									
W.D.	6979396	7818048	8207020	7304000	6875179	7177857	1635719	1741378	1695308	564545	585852	718073
GOS	5034470	5028677	4926562	93000	265179	291250	60310	71031	63287	144416	192229	191251
Delta	145226	99959	102683	2684600	2452679	1789286	203603	201262	163667	94700	105590	106558
Sinai	2049184	2082130	2162497	97600	22321	1071	56128	37337	35641	79889	81363	86493
Upper Egypt	33108	25190	15290									
Total	16464595	17278087	17740886	36977200	33893215	32875535	3572016	3592102	3247986	1327249	1439548	1562871







Increase Production with Optimal Wellbore Placement



